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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,760	12/03/2004	Thomas Rosch	ZAHFRI P692US	6731
20210 7590 04/16/2007 DAVIS & BUJOLD, P.L.L.C. 112 PLEASANT STREET CONCORD, NH 03301			EXAMINER VANAMAN, FRANK BENNETT	
			ART UNIT	PAPER NUMBER
			3618	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/16/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/516,760

Applicant(s)

ROSCH, THOMAS

Examiner

Frank Vanaman

Art Unit

3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-35 is/are pending in the application.
- 4a) Of the above claim(s) 22, 25 and 27-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-21, 23, 24 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/3/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Applicant's election of Species I in the reply filed on March 26, 2007 is acknowledged. Applicant has urged that the restriction requirement be withdrawn - in what appears to be a statement of traversal, however because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Applicant has identified claims 18-21, 23, 24 and 26 as being readable on the elected species, and these claims are treated herein.

Specification

3. The disclosure is objected to because of the following informalities: in the amendment to paragraph 0031 in the preliminary amendment, at line 21 of the paragraph, it appears as though the reference to "gear train 4" should actually be drawn to numeral --14--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. Claims 18-21, 23, 24 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 18, lines 4-5, the recitation of "available space occupied by the drive wheel" appears to be contradicted by the recitation "radially offset outward from the drive wheel" which is clearly directed to space not occupied by the drive wheel; in claim 18, lines 10-11, "connection gear-chain" lacks a clear antecedent basis (compare to claim 18, lines 6-7); in general, with respect to this term, "connection" and "connecting" appear to have been used interchangeably -- the clarity may be improved if the identically same term is consistently used to identify the same element; in claim 21, line 4, "jointed rod" lacks a clear antecedent basis -- from the context, it appears as though this is a reference to the --jointed shaft--.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 18-21, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oswald (US 4,407,381, cited by applicant) in view of Lutz (US 5,829,542, cited by applicant). Oswald teaches a vehicle having an underbody (12/54) and a plurality of drive wheels (20, 22, 24), at least one drive motor (30) assigned to each of the plurality of drive wheels, the drive motor being located in "an available space occupied by the wheel, but radially offset outside the wheel, there being a torque transmitting arrangement comprising spur-gears (e.g., 48, 50) and a chain (52), placed in a housing portion (e.g., part 54) located on the side of the motor and wheels which is more proximate to the center of the vehicle, the spur-gear-chain arrangement driving a final drive shaft (26), through an end-linkage connection (e.g., joint of 50 and 100/26), the housing portion being rigidly affixed to the remainder of the underbody portion, at least the shaft portion (26) having a sealing arrangement (proximate 102) between the underbody portion 12 and casing portion 54, the arrangement positioned such that a motor remains dry if a portion of the wheel is under water, the shaft (26) output including a sealing collar (outermost end of 104), the drive wheels accepting a wheel head transmission element (e.g., 62, 66, 72). Oswald fails to teach the provision of a jointed shaft between the output of the gear chain and the drive wheels. Lutz teaches that it is well known to provide a wheel (5) with a jointed shaft (19) between a drive output and the wheel, e.g., to allow independent suspension of the wheels. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide each wheel output (26) taught by Oswald with a jointed shaft, as taught by Lutz, for the purpose of allowing the wheels to be independently suspended, allowing improved traversal of uneven ground.

As regards claim 20, while the reference to Oswald as modified by Lutz fails to explicitly teach a portion of the gear-chain mechanism penetrating the underbody, (e.g., figure 3a not specifically showing portions of housing element 54), in view of the presence of the housing proximate spur gear element 50 (figure 2), and the teaching of Oswald to use fasteners (94, 108, etc) and sealing arrangements (e.g., with 102), it would have been obvious to one of ordinary skill in the art at the time of the invention to provide a fastener portion connecting casing portion 54 with portion 12 which penetrates the underbody portion for the purpose of connecting the two elements together, and additionally it would have been obvious to one of ordinary skill in the art at the time of the invention to use a sealing element at the connection for the purpose of preventing undesirable material from entering the underbody and/or casing.

7. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oswald in view of Lutz and Brunner et al. (US 5,322,141). The references to Oswald and Lutz are discussed above and fail to teach in an area of the motor an opening which can be closed by a cover. Brunner et al. teach the provision of a motor (9) in a drive for a vehicle wheel, wherein in an area of the motor, a cover (2) is provided to cover an opening. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide an opening and cover in the area of the motor of the drive of Oswald as modified by Lutz, as taught by Brunner et al., for allowing access to the motor internal mechanism.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Quartullo (US 2,589,863), Barr (US 3,495,672), Rabek (US 5,343,974), Hanagan (US 5,960,901), Wilson (US 6,446,742), and Angeles (US 6,948,576) teach vehicle drive arrangements of pertinence.

9. Any inquiry specifically concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is 571-272-6701.

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Any inquiries of a general nature or relating to the status of this application may be made through either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

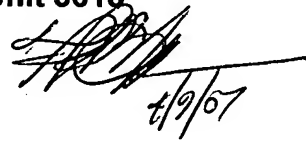
A response to this action should be mailed to:

Mail Stop _____
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450,

Or faxed to:

PTO Central Fax: 571-273-8300

F. VANAMAN
Primary Examiner
Art Unit 3618



Handwritten signature of F. Vanaman, dated 4/9/07.